

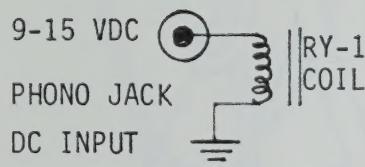
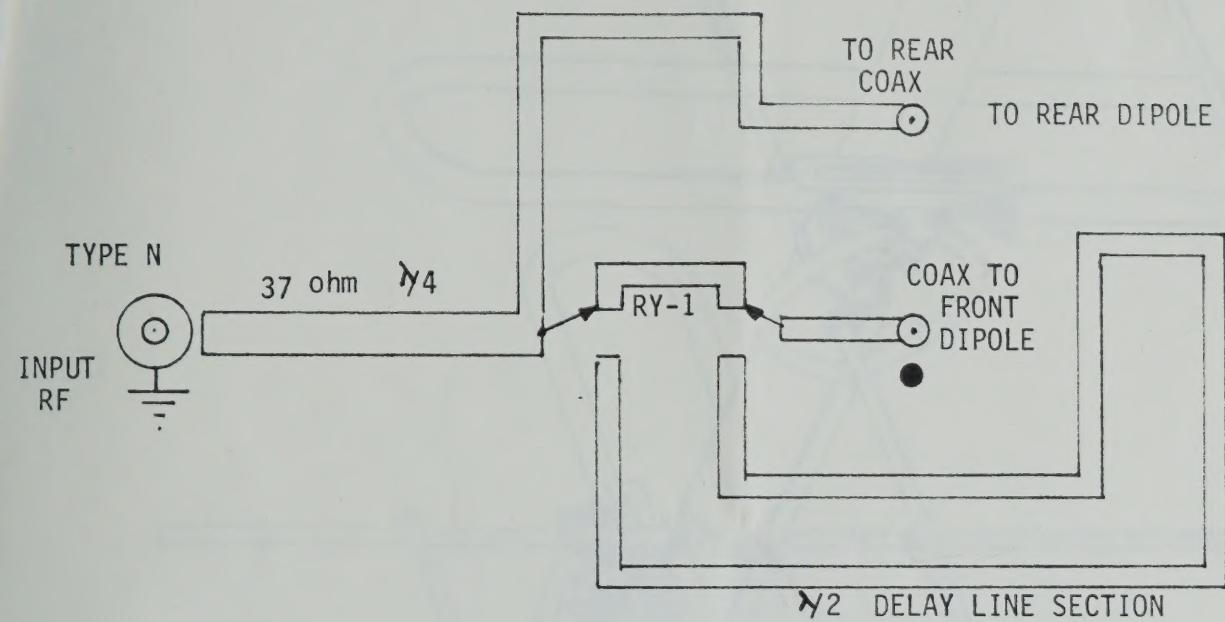
The CS-2 is the optional circularity reversing switch for use with the KLM 420-450-18C only.

The CS-2 comes complete with cables that feed the 420-450-18C. It also matches the 420-450-18C to 50 ohms unbalanced and provides a type "N" female connector for attachment to your main 50 ohm feedline to the transmitter/receiver. The CS-2 requires 9-15 VDC at 100 MA.

CS-2 MOUNTING

1. The CS-2 mounts at the rear of the boom as shown in the photo. A mounting bracket is supplied for this purpose. Determine which side of the 420-450-18C will normally be facing down.
2. Slide the CS-2 to approximately 2" behind the last element (Reflector) and tighten the $\frac{1}{4}$ -20 nuts on the mounting hardware with the CS-2 rotated so the cables face down.
3. Note the numbers on the PC board next to the cables. Route #2 cable forward to the front dipole. If the balun has already been installed, remove it temporarily.
4. Slip the cable center conductor lug over the left feedpoint (looking forward from the rear with the dipole feedpoints up) and the braid lug over the ground stud (element insulator mounting screw).
5. Re-install the balun and the 6-32 and 8-32 hardware and tighten.
6. Form a three to four inch diameter loop in the other CS-2 cable and route it to the rear folded dipole.
7. Remove the balun, if installed, and attach the cable as described in Step 4. The center conductors of each coax must attach to the same side of the respective folded dipoles in order to have Right Hand Circular Polarity (RHCP) with the CS-2 relay in the un-enginized position.
8. Re-install the balun, 6-32, and 8-32 hardware and tighten.
9. Nylon ties have been provided for tying the cables and balun loops down tight against the boom. Black electrician's tape, waxed string, or equivalent may also be used.
10. The 420-450-18C may be center mounted or rear mounted. Center mounting requires a non-conductive support mast for at least two feet around the antenna in order to avoid severely distorting the circularity of this antenna. The feedline also must be run from the rear of the boom back to the support mast. Do not run the feedline down the non-conductive mast. Route the feedline off the rear of the boom and attach the feedline to the mast 24-30 inches below the antenna.

CS-2
ELECTRICAL DIAGRAM



RY1 = GUARDIAN #1365

